Indices

AIIE TRANSACTIONS

Volume 9 — 1977

Subjects (coded) and titles

0100 ***Costs***

0102 Cost Controls

"A Multi-Resource Project Scheduling Algorithm," E. M. Dar-El, Yigal Tur; March 1977, page 44.

"On the Use of A Vehicle Routing Algorithm for the Parallel Processor Problem with Sequence Dependent Changeover Costs," R. G. Parker, R. H. Deane, R. A. Holmes; June 1977, page 155.

0103 Cost Estimating

"The Transfer of Domestic-Market Production to a Foreign Site," James V. Jucker; December 1977, page 321.

0105 Productivity

"An Example of Simulation to Improve Plant Productivity," Walton Hancock, Richard Dissen, Alan Merten; March 1977, page 2.

"Dual-Phase Simulation–A Mixed Time Frame Systems Analysis Tool," David F. Gibson, Edward L. Mooney; December 1977, page 338.

0200 ***Employee Relations***

0300 ***Engineering Economics***

"Truncated Linear Gaussian Loss Integrals," James R. Buck; June 1977, page 170.

0301 Cash Flow Analysis

"A Closed-Form Methodology for Computing Present Worth Statistics of Risky Discrete Cash-Flows," James R. Buck, Jose M. A. Tanchoco; September 1977, page 278.

0304 General

"The Transfer of Domestic-Market Production to a Foreign Site," James V. Jucker; December 1977, page 321.

0400 ***Facilities Planning, Design***

0401 Environment Protection

"A Practical Method for Industrial Heat Stress Allowance Determination," Walton M. Hancock, Don B. Chaffin; June 1977, page 144.

0402 Facility Location

"A Survey of Recent Results for a Class of Facilities Location Problems," L. F. McGinnis; March 1977, page. 11.

"Extensions of the Multi-Period Facility Phase-Out Model: New Procedures and Application to a Phase-In/Phase-Out Problem," Gary M. Roodman, Leroy B. Schwarz; March 1977, page 103.

"The Rectilinear Distance Location-Allocation Problem," Anis D. Sherali, C. M. Shetty; June 1977, page 136.

"An Application of Facilities Location Theory to the Design of Forest Harvesting Areas," Dennis P. Dykstra, James L. Riggs; September 1977, page 270.

0405 Plant Layout Analysis

"Efficient Points in Location Problems," Richard E. Wendell, Arthur P. Hurter, Jr., Timothy J. Lowe; September 1977, page 238.

0500 ***Functional Operations***

0504 Maintenance, Plant Engineering

"Maintenance Scheduling for Multicomponent Equipment," Roger C. Vergin, Michael Scriabin; September 1977, page 297.

"Noise Analysis by iso-dbA Mapping," Chester J. Kishel, Edward J. R. Hudec; December 1977, page 377.

0600 ***Human Engineering***

0606 Personnel Scheduling

"A Scheduling Algorithm for the Unbalanced Production Line," Russell E. Jacobson, Randall F. Sadowski; March 1977, page 36.

0607 Personnel Selection

"Sensitivity of Optimum Workforce Size to Employee Absenteeism in Stochastic Workload Situations," Phiroze J. Nagarvala, Shlomo Globerson; December 1977, page 414.

0608 Safety and Health

"A Practical Method for Industrial Heat Stress Allowance Determination," Walton M. Hancock, Don B. Chaffin; June 1977, page 144.

"Noise Analysis by iso-dbA Mapping," Chester J. Kishel, Edward J. R. Hudec; December 1977, page 377.

0700 ***Incentive Plans***

0800 ***Industrial Engineering***

"Education and Professional Practice Criticism and Feedback," William T. Morris; September 1977, page 260.

0804 Education

"Education and Professional Practice: Criticism and Feedback," William T. Morris; September 1977, page 260.

0900 ***Industries***

0903 Health Care and Other Services

"Scheduling Multispecialty Clinics Using Integer Programming," Thom J. Hodgson, Kerry E. Kilpatrick, Ira M. Longini; March 1977, page 69.

0904 Manufacturing

"An Example of Simulation to Improve Plant Productivity," Walton Hancock, Richard Dissen, Alan Merten; March 1977, page 2.

"The Development of an Automated Program for the Optimal Design of Bulk Cushioning Systems," Don McDaniel; March 1977, page 82

0906 Others

"Optimal Scheduling for Even-Numbered Team Athletic Conferences," Bryan C. Ball, Dennis B. Webster; June 1977, page 161.

1000 ***Management***

1003 Decision Making

"Optimal Scheduling for Even-Numbered Team Athletic Conferences," Bryan C. Ball, Dennis B. Webster; June 1977, page 161.

"Sensitivity of Optimum Workforce Size to Employee Absenteeism in Stochastic Workload Situations," Phiroze J. Nagarvala, Shlomo Globerson; December 1977, page 44.

1107 Project Management

"A Multi-Resource Project Scheduling Algorithm," E. M. Dar-El, Yigal Tur; March 1977, page 44.

1100 ***Material Handling***

1102 Conveyors

"A Model of a Closed-Loop Conveyor with Random Material Flow," Eginhard J. Muth; December 1977, page 345.

1105 Dispatching, Scheduling

"On the Use of A Vehicle Routing Algorithm for the Parallel Processor Problem with Sequence Dependent Changeover Costs," R. G. Parker, R. H. Deane, R. A. Holmes; June 1977, page 155.

"Evaluating a Sequential Vehicle Routing Algorithm," Bruce L. Golden; June 1977, page 204.

1108 Packaging

"The Development of an Automated Program for the Optimal Design of Bulk Cushioning Systems," Don McDaniel; March 1977, page 82.

1111 Storage, Warehousing

"Analysis of the Effect of Buffer Storage Capacity in Transfer Line Systems," Kenjiro Okamura, Hajime Yamashina; June 1977, page 127.

"The Output of A Two-Stage System with Unreliable Machines and Limited Storage," Edward Ignall, Alvin Silver; June 1977, page 183.

"Order Quantity, Product Popularity, and The Location of Stock in a Warehouse," Hoyt G. Wilson; September 1977, page 230.

"The Segregated Storage Problem: Some Properties and an Effective Heuristic," James R. Evans, Frank H. Cullen; December 1977, page 409.

1200 ***Methods Engineering***

1300 ***Quantitative Methods***

"Computational Experience with a Sequencing Algorithm Adapted to the Tardiness Problem," Kenneth R. Baker; March 1977, page 32.

"A Scheduling Algorithm for the Unbalanced Production Line," Russell E. Jacobson, Randall F. Sadowski; March 1977, page 36.

"Reformulation of Special Ordered Sets for Implicit Enumeration Algorithms with Applications in Nonconvex Separable Programming," Dennis L. Bricker; June 1977, page 195.

"Scheduling on Parallel Machines to Minimize Two Criteria Related to Job Tardiness," Thomas S. Nunnikhoven, Hamilton Emmons; September 1977, page 288.

"Minimizing the Sum of Completion Times of n Jobs over m Machines in a Flowshop—A Branch and Bound Approach," S. P. Bansal; September 1977, page 306.

"A Model of a Closed-Loop Conveyor with Random Material Flow," Eginhard J. Muth ; December 1977, page 345.

"Scheduling Production on One Machine with Changeover Costs," Wade C. Driscoll, Hamilton Emmons; December 1977, page 388.

1301 Mathematical Models

"On a Multichannel Queueing System with Ordered Entry and Heterogeneous Servers," Masayuki Matsui, Jiro Fukuta; June 1977, page 209.

"Parallel-Channel, Dual-Resource Constrained Queueing Systems with Heterogeneous Resources," G. L. Hogg, D. T. Phillips, M. J. Maggard; December 1977, page 352

1302 Networks

"An Efficient Procedure for Implementing a Dual Simplex Network Flow Algorithm," Richard V. Helgason, Jeff L. Kennington; March 1977, page 63.

"Some Network Flow Models and Heuristics for Multiproduct Production and Inventory Planning," James R. Evans; March 1977, page 75.

"Parallel-Channel, Dual-Resource Constrained Queueing Systems with Heterogeneous Resources," G.L. Hogg, D. T. Phillips, M. J. Maggard; December 1977, p. 352.

"Network Application in Industry and Government," Fred Glover, Darwin Klingman; December 1977, page 363.

1303 Programming: Linear, Nonlinear

"A Survey of Recent Results for a Class of Facilities Location Problems," L. F. McGinnis; March 1977, page 11.

"An Efficient Procedure for Implementing a Dual Simplex Network Flow Algorithm," Richard V. Helgason, Jeff L. Kennington; March 1977, page 63.

"Scheduling Multispecialty Clinics Using Integer Programming," Thom J. Hodgson, Kerry E. Kilpatrick, Ira M. Longini; March 1977, page 69.

"An Application of Facilities Location Theory to the Design of Forest Harvesting Areas," Dennis P. Dysktra, James L. Riggs; September 1977, page 270.

"The Robustness of the Variable S Inventory Model: Some New Results," Cetin Akturk, James V. Jucker; December 1977, page 382.

"The Segregated Storage Problem: Some Properties and an Effective Heuristic," James R. Evans, Frank H. Cullen; December 1977, page 409.

1305 Simulation, Games

"An Example of Simulation to Improve Plant Productivity," Walton Hancock, Richard Dissen, Alan Merten; March 1977, page 2.

"Centralized Scheduling and Priority Implementation Heuristics for a Dynamic Job Shop Model," Rosser T. Nelson, Charles A. Holloway, Ruby Mei-Lun Wong; March 1977, page 95.

"A Versatile Four Parameter Family of Probability Distributions Suitable for Simulation," Bruce W. Schmeiser, Stuart Jay Deutsch; June 1977, page 176.

"Some Relationships Between Dynamic Shop Operations and the Capacity Rating Methodology," W. E. Wilhelm, R. E. Doty; September 1977, page 223.

"Dual-Phase Simulation—A Mixed Time Frame Systems Analysis Tool," David F. Gibson, Edward L. Mooney; December 1977, page 338.

"Sensitivity of Optimum Workforce Size to Employee Absenteeism in Stochastic Workload Situations," Phiroze J. Nagarvala, Shlomo Globerson; December 1977, page 44.

1306 Applied Probability

"A Versatile Four Parameter Family of Probability Distributions Suitable for Simulation," Bruce W. Schmeiser, Stuart Jay Deutsch; June 1977, page 176.

"The Effects of Inspector Error on the Operation of a c-Chart," Alan L. Dorris; September 1977, page 312.

1307 Experimental Design

"Noise Analysis by iso-db A Mapping, Chester J. Kishel, Edward J. R. Hudec; December 1977, page 377.

"Selecting Bayesian Single Sample Acceptance Plans for Quality Control by Pattern Search," Herbert Moskowitz; December 1977, page 396.

1400 *Production and Inventory Control*

"A Scheduling Algorithm for the Unbalanced Production line," Russell E. Jacobson, Randall F. Sadowski ; March 1977, page 36.

"Some Relationships Between Dynamic Shop Operations and the Capacity Rating Methodology," W. E. Wilhelm, R. E. Doty; September 1977, page 223.

"The Transfer of Domestic-Market Production to a Foreign Site," James V. Jucker; December 1977, page 321.

1401 Distribution Systems

"Analysis of the Effect of Buffer Storage Capacity in Transfer Line Systems," Kenjiro Okamura, Hajime Yamashina; June 1977, page 127.

"Evaluating a Sequential Vehicle Routing Algorithm," Bruce L. Golden; June 1977, page 204.

1402 Forecasting

"Synthesizing Short Run Production and Marketing Decisions," Ulf Peter Welam; March 1977, page 53.

1403 Inventory Control

"An Order-Level Lot-Size Inventory Model for Deteriorating Items," Y. K. Shah; March 1977, page 108.

"Order Quantity, Product Popularity, and the Location of Stock in a Warehouse," Hoyt G. Wilson; September 1977, page 230.

"The Robustness of the Variable S Inventory Model: Some New Results," Cetin Akturk, James V. Jucker; December 1977, page 382.

1405 Production Control

"Computational Experience with a Sequencing Algorithm Adapted to the Tardiness Problem," Kenneth R. Baker; March 1977, page 32.

1406 Production Planning

"The Output of A Two Stage System with Unreliable Machines and Limited Storage," Edward Ignall, Alvin Silver; June 1977, page 183.

1407 Production Scheduling

"An Improved Algorithm for Scheduling Jobs on Identical Machines," J. Wesley Barnes, J. J. Brennan; March 1977, page 25.

"A Multi-Resource Project Scheduling Algorithm," E. M. Dar-El, Yigal Tur; March 1977, page 44.

"Synthesizing Short Run Production and Marketing Decisions," Ulf Peter Welam; March 1977, page 53.

"Some Network Flow Models and Heuristics for Multiproduct Production and Inventory Planning," James R. Evans; March 1977, page 75.

"Centralized Scheduling and Priority Implementation Heuristics for a Dynamic Job Shop Model," Rosser T. Nelson, Charles A. Holloway, Ruby Mei-Lun Wong; March 1977, page 95.

"Scheduling on Parallel Machines to Minimize Two Criteria Related to Job Tardiness," Thomas S. Nunnikhoven, Hamilton Emmons; September 1977, page 288.

"Maintenance Scheduling for Multicomponent Equipment," Roger C. Vergin, Michael Scriabin; September 1977, page 297.

"Minimizing the Sum of Completion Times of n Jobs over m Machines in a Flowshop—A Branch and Bound Approach," S. P. Bansal; September 1977, page 306.

"Scheduling Rules for Parallel Processors," Louis A. Martin-Vega, H. Donald Ratliff; December 1977, page 330.

"Scheduling Production on One Machine with Changeover Costs," Wade C. Driscoll, Hamilton Emmons; December 1977, page 388.

1500 *Quality Control*

1501 Inspection

"A Comparison of Two Optimal Inspection Procedures in the Presence of Errors," Matthew Rosenshine; March 1977, page 19.

"Inspection Policies for A System Which Is Inoperative During Inspection Periods," Hanan Luss; June 1977, page 189.

1503 Reliability

"Availability of Maintained Systems: A State-of-the-

Art Survey," C. H. Lie, C. L. Hwang, F. A. Tillman; September 1977, page 247.

1504 Sampling

"Price Adjusted Single Sampling with Quadratic Indifference," Joseph W. Foster, Oscar T. Perry; March 1977, page 88.

"The Effects of Inspector Error on the Operation of a c-Chart," Alan L. Dorris; September 1977, page 312.

"Selecting Bayesian Single Sample Acceptance Plans for Quality Control by Pattern Search," Herbert Moskowitz; December 1977, page 396.

1600 ***Work Measurement***

1700 ***Data Processing Systems Design***

"Reformualtion of Special Ordered Sets for Implicit Enumeration Algorithms, with Applications in Nonconvex Separable Programming," Dennis L. Bricker; June 1977, page 195.

1703 Analysis Techniques

"Selecting Bayesian Single Sample Acceptance Plans for Quality Control by Pattern Search," Herbert Moskowitz; December 1977, page 396